

WG4 - Muon Physics

Plan 2015

- ◆ Andrew Norman (FNAL)
- ◆ Haibo Li (IHEP, Beijing)
- ◆ Angela Papa (PSI)

Nufact2015

Rio de Janeiro, 10-15 August

Muon Physics

- ◆ Connection between muon physics and neutrino factories

- ◆ Same ν/μ production mechanism



- ◆ A neutrino factory is also a muon factory and viceversa
- ◆ Probes for physics behind standard model
 - ◆ Is there a hidden connection between muon and neutrino physics?

Guide lines 2015

- ◆ With the next generation of precision measurements experiments starting (muon $g-2$, mu to e conversion) are there additional measurement which can be made to ensure their success or to improve their background estimates and expand their sensitivities?
- ◆ Are there connections between cLFV searches and precision measurements which can be exploited to improve our progress in both regimes?
- ◆ How could a neutrino factory (and the supporting accelerator complex) be exploited to push our sensitivities for cLFV searches and precision measurements? Is there a secondary physics program that could be supported by such a complex which could address questions in both HEP and Nuclear Physics?
- ◆ What is the global picture that ties together “direct” and “indirect” for BSM physics? What are the results from the LHC and B-Factories telling us and is there a way to connect this sector with the next generation of precision measurements?

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Plenary talks

- ◆ cLFV and Future Facilities (Y. Uchida), Wed. 12 August (Exp. Overview)
- ◆ Precision muon physics and EDMs (B. Kiburg), Wed. 12 August (Exp. Overview)
- ◆ Connections between $g-2$, EDMs, cLFV and LHC (P. Paradisi) Thu. 13 August (Theory Overview)

Parallel sessions

- ◆ Monday 14:30-16:30
 - ◆ MEG (Grigoriev)
 - ◆ MEGII (Papa)
 - ◆ Mu2e (Lynch)
 - ◆ COMET (Krillker)

muon cLFV searches

Parallel sessions

- ◆ Tuesday 11:00-13:00

- ◆ DeeMee (Aoki)

- ◆ Mu3e (Gredig)

muon cLFV searches
+

- ◆ g-2 FNAL (Lynch)

- ◆ g-2 JPARK (Otani)

precision measurements

Parallel sessions

New

- ◆ Tuesday 14:30-16:30

- ◆ LHC LFV Atlas (Blocker)

- ◆ Belle LFV (Cecchi)

- ◆ LHC LFV CMS (Nehrkorn)

- ◆ EDMs at PSI (Wursten)

collider cLFV searches
+
precision measurements

Parallel sessions

New

- ◆ Wednesday 10:30-12:30
 - ◆ PiBeta/Pen (Pocanic)
 - ◆ Alcap (Krikler)
 - ◆ Mulan (Lynch)
 - ◆ Mucap (Kiburg)

Auxiliary measurements

Parallel session

Beamlines
+
facilities

- ◆ Thursday (J34) 14:30-16:00
 - ◆ PRISM (Pasternak)
 - ◆ Mu2e Machine talk (Nagaslaev)
 - ◆ J-PARK High Intensity (Sekiguchi)
 - ◆ Muon Beam for COMET (Yang)

Parallel session

auxiliary

- ◆ Friday (J14) 11:00-12:00
 - ◆ Fermilab SBN Program (Terao)
 - ◆ NA61 -focused on pion yields (Bravar)

...enjoy the session